

## A 2 Component Epoxy Resin Patching Mortar

**Guardian EM2** is a solvent free 2 part epoxy resin thixotropic patching mortar consisting of a resin and hardener containing especially selected fillers. On mixing a multifunctional epoxy adhesive & repair mortar is produced.

### USES & ADVANTAGES

**Guardian EM2** is an easy to apply epoxy mortar with medium size fillers allowing for various uses, these include: - repair of precast elements, finishing of I beam ends, repairing damaged concrete edges, providing an abrasion resistant lining, vertical & overhead repairs, also use as an adhesive.

**Advantages include:-**

- Easy to apply to precast elements & edges of concrete.
- Good build.
- Excellent adhesion.
- Abrasion & impact resistance.
- Excellent strengths.
- Suitable for both dry & damp surfaces.
- Uneffected by high humidity.
- Colored components to ensure good mixing.
- Good chemical resistance.

### PROPERTIES

<b>Color:</b>	Part A - Off yellowish white thixotropic paste. Part B - Off yellowish black thixotropic paste.	
<b>Density:</b>	Approx. 1.9-2.1 kg/litre	
<b>Mixing ratio:</b>	Part A : B = 2 : 1 by weight Part A : B = 2 : 1 by volume	
<b>Pot Life:</b>	<u>Temperature °C</u>	<u>6 kg set</u>
	40	30-40 min.
	30	60 min.
	20	90 min.
	<i>Note: To obtain maximum pot life, spread <b>Guardian EM2</b> into a thin (less than 10 mm.) layer immediately after mixing.</i>	
<b>Compressive strength:</b> ASTM D695	60-64 N/mm2 @1 day 70-75 N/mm2 @7 days 78-82 N/mm2 @28 days	
<b>Flexural strength:</b>	25-35 N/mm2 @ 28 days	
<b>Bond Strength:</b> ASTM C882	>13 N/mm2 at 28 days	
<b>Setting Time:</b>	Approx. 3 hrs @25°C	@15mm thickness

Data quoted is typical for this product and does not constitute a specification.

**Note:** To obtain performance characteristics stated in this data sheet, the mixing ratio must be maintained.

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### SURFACE PREPARATION

All grease, oil, chemical contamination, dust, laitance and loose concrete must be removed by scabbling or light bush hammering to provide a sound substrate. Concrete must be at least 14 days old prior to treatment. Steel surfaces should be grit blasted to white metal. Surfaces which show any traces of oil must be degreased with a chemical degreaser prior to grit blasting.

### PRIMING

Surfaces to receive **Guardian EM2** should be well primed with **Guardian WEAP** first.

### MIXING

Care should be taken to ensure that **Guardian EM2** is mixed thoroughly. The hardener and the resin components should first be stirred separately to disperse any settlement. The entire contents of the hardener tin should then be poured into the resin tin and the two components mixed thoroughly using a low-speed drill and paddle for at least 2 minutes until a uniform colour is obtained.

### APPLICATION

Apply the mixed **Guardian EM2** with a notched trowel, putty knife, caulking gun, etc. depending upon the application. Bonded surfaces should be held rigidly together until the **Guardian EM2** has set.

### COVERAGE RATES

Approx. 2 kgs/m<sup>2</sup>/mm thickness.

### CLEANING

Clean all tools immediately after use with thinner.

### PACKAGING

6 kg set (A+B).

### STORAGE & SHELF LIFE

**Guardian EM2** has a shelf life of 12 months when stored in a dry place below 35°C in unopened containers.

### HEALTH & SAFETY

Prolonged and repeated skin contact with epoxy resins and curing agents may cause dermatitis in persons sensitive to these products. Gloves, barrier creams, protective clothing and eye protection should be worn when handling these products. If poisoning occurs, contact a doctor or Poisons Information Centre. If swallowed, do NOT induce vomiting-give a glass of water. If in eyes, hold eyes open, flood with water for at least 15 minutes. If skin contact occurs, remove contaminated clothing and wash skin thoroughly.

### TECHNICAL SERVICE

Guardian offers a comprehensive range of high performance, high quality products suitable for use within all aspects of the concrete repair and protection industry. In addition, the company offers a technical support package to specifiers, end users and contractors, as well as on-site assistance. The Guardian Coating Service Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.

### QUALITY ASSURANCE (OEM)

ISO 9001 : 2015 verified by TUV Nord.

All statements and data presented herein are given in good faith and believed to be appropriate and reliable. It is given without express or implied warrant or guarantee. Potential users of Guardian's materials are urged to conduct confirmatory trials to satisfy themselves as to the suitability of the selected product for their particular end use prior to purchase.